

Amendments to the Specification:

Please replace the abstract with the following amended abstract:

A method for evaluating a feature. The method includes [[,]] consisting of receiving an image of the feature and determining respective coordinates of a plurality of points on an edge of the feature in the image. A figure having a non-circular and non-linear shape is fitted to the plurality of points, and respective distances between the plurality of points and the figure are determined. A roughness parameter for the feature is computed ~~in response to~~ using the respective distances. The method ~~finds application~~ may be applied in the analysis of critical dimensions (CD) of integrated circuits and, particularly, in the measurement of the edge roughness of their features and components as imaged ~~by means of eg.~~ The using electron scanning microscopy (SEM).

Please replace the following paragraph with the following respective amended paragraphs:

[0020] Reference is now made to Fig. 1, which is a schematic diagram of a semiconductor analysis system 10, according to an embodiment of the present invention. System 10 includes a scanning electron microscope (SEM) 12, which generates an electron beam 14 that scans a surface 16 of a semiconductor wafer 18. The SEM collects secondary electrons from a feature 20 on the surface, and an imaging unit 21 generates an image of the feature from the secondary electrons. SEM 12 includes a processor 24 and a memory [[26]] 25 wherein is stored software that enables the processor to operate the SEM, and to perform analyses on the data generated by the SEM. Herein below, unless otherwise stated, feature 20 is assumed to include a contact hole 28, which is illustrated in more detail in Fig. 2. Typically, the image of the contact hole is generated by applying an edge detection algorithm to raw data derived from the secondary electron collection. Methods for generating the raw data and for determining the edge therefrom are well known in the art, and processor 24 applies one or more of these methods to generate the image. Alternatively, the image of feature 20 is generated by another type of microscope known in the art, such as an optical microscope.

Amendments to the Drawings:

Replacement figure bearing Figure 1 is submitted herewith. Drawing amendments are discussed in the Remarks section on page 12.